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Background and aims: The purpose of the present study was to investigate the feasibility of using volumetric modulated arc therapy with SmartArc (VMAT-S) to achieve radiation delivery efficiency higher than that of intensity-modulated radiotherapy (IMRT) and helical tomotherapy (HT) when treating endometrial cancer, while maintaining plan quality. Methods: Nine patients with endometrial cancer were retrospectively studied. Three plans per patient were generated for VMAT-S, IMRT and HT. The dose distributions for the planning target volume (PTV), organs at risk (OARs) and normal tissue were compared. The monitor units (MUs) and treatment delivery time were also evaluated.

Results: The average homogeneity index was 1.06, 1.10 and 1.07 for the VMAT-S, IMRT and HT plans, respectively. The V_{40} for the rectum, bladder and pelvis bone decreased by 9.0%, 3.0% and 3.0%, respectively, in the VMAT-S plan relative to the IMRT plan. The target coverage and sparing of OARs were comparable between the VMAT-S and HT plans. The average MU was 823, 1105 and 8403 for VMAT-S, IMRT and HT, respectively; the average delivery time was 2.6, 8.6 and 9.5 minutes, respectively.

Conclusions: For endometrial cancer, the VMAT-S plan provided comparable quality with significantly shorter delivery time and fewer MUs than with the IMRT and HT plans. In addition, more homogeneous PTV coverage and superior sparing of OARs in the medium to high dose region were observed in the VMAT-S relative to the IMRT plan.
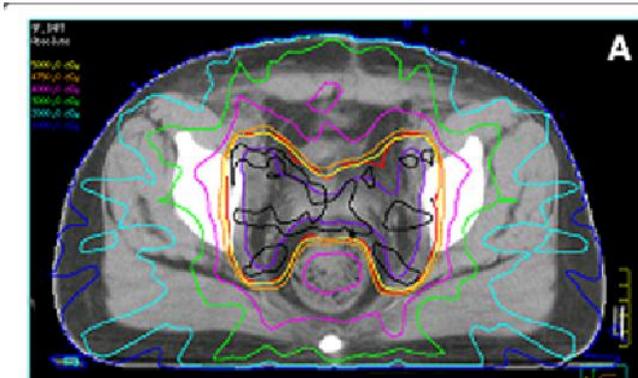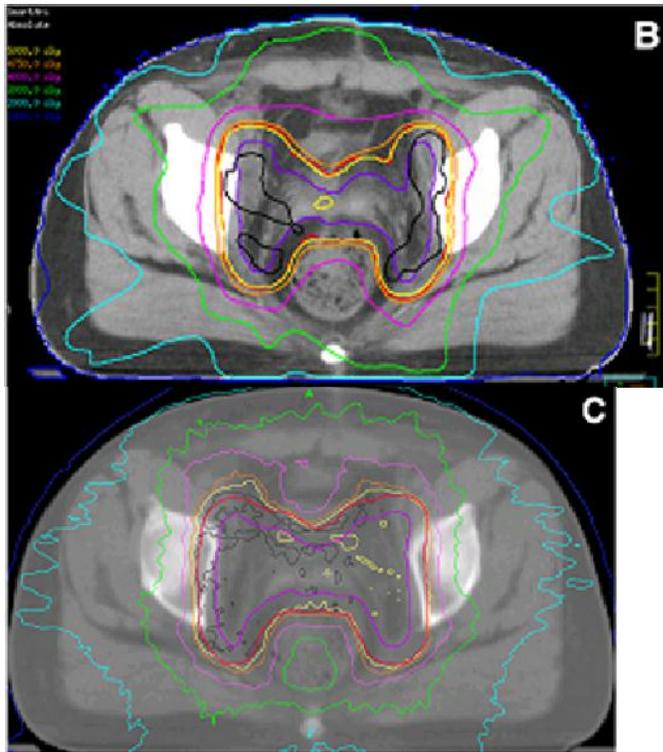
Figure 1 Representative axial computed tomography slices showing isodose distributions. (A) IMRT. **(B)** VMAT-S. **(C)** Tomotherapy. PTV is shown in red, CTV in slate blue. Isodose lines are indicated as follows: inverse grey, 5250 cGy; yellow, 5000 cGy; orange, 4750 cGy; purple, 4000 cGy; green, 3000 cGy; sky blue, 2000 cGy; and blue 1000 cGy.
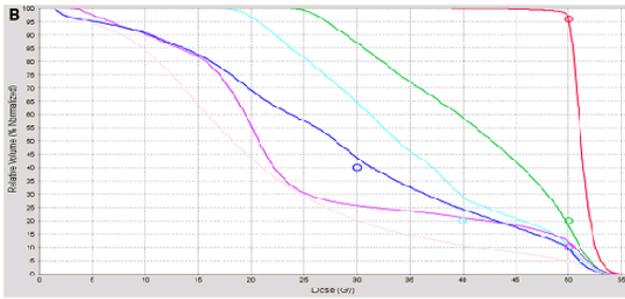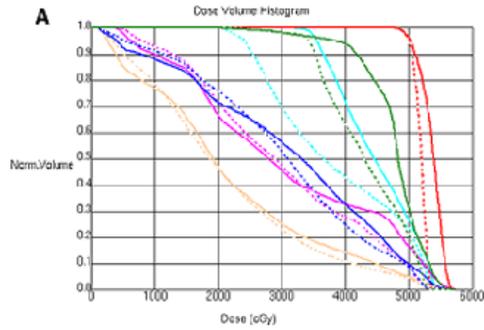

Figure 2 Representative dose–volume histograms for (a) IMRT Vs VMAT-S, (b) tomotherapy. The curves of IMRT and Tomotherapy indicated in solid line, those of SmartArc indicated in dashed line. The colors of the curves indicated as follows: red PTV; forest, rectum; skyblue, bladder; purple, bowel; blue, pelvic bones; skin, normal tissue.

IGCS-0313
Lecture

CERVICAL CANCER VACCINATION UPTAKE REMAINS LOW IN ONE OF THE UNITED STATES' LARGEST INTEGRATED MANAGED CARE CONSORTIUM

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Background: With sweeping healthcare reform in the U.S., successful healthcare organizations with large memberships like Kaiser Permanente are ideal to study the uptake of the HPV vaccine six years after it was first approved by the US FDA.

Methods: 2012 clarity reports within the Epic® health record software were generated for female and males receiving an initial dose of the quadrivalent HPV vaccine (HPV4) and compared to previously published reports of the organization's experience in the first two years following FDA approval of HPV4.

Results: During 2012, 21,725 patients received an initial dose of HPV4. Only 17.4% completed the series representing a nearly 50% reduction from what was reported four years prior. Males completed the series at a higher rate than females, 23.5% and 14.7%, respectively. There were 10,793 patients who received a second dose of HPV4, 52% and 48% ($p < 0.05$) were females and males, respectively.

Conclusions: According to EHR reports, vaccination uptake among females and males remains lower than expected for a system recognized for it's outstanding preventative programs. The rates are consistent with what has been reported recently for many urban centers of the United States. We have effective tools to prevent cervical cancer but are not using them effectively to protect our girls from the future devastating effects of this disease.

IGCS-0305
Lecture

LINKING CERVICAL CANCER SCREENING TO HPV VACCINATION: SCREENING OUTCOMES OF THE VACCINATION AND CERVICAL CANCER SCREENING PROJECTS (VACCS)

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Background and aims

Mainly opportunistic cervical cancer screening happens in South Africa. Primary prevention with HPV vaccination is now possible. This study investigates the feasibility of linking screening in adults with vaccination of school girls.

Methods

VACCS 1

Girls (grades 4 - 7) at ten primary schools were offered vaccination (3 dosages). Their female parents/guardians were invited to attend an information event where information about cervical cancer, vaccination and screening was given, with an invitation to self-administered HPV screening.

VACCS 2

Girls (grades 4 - 7) at five primary schools were offered vaccination (2 dosages six months apart). Leaflets with information about cervical cancer, screening and vaccination were handed out. The invitation for screening was the same as for VACCS 1.

Results

At the information events VACCS 1 795 screen tests were handed out and 253 (31.8%) were returned. The mean age of those screened was 38.33 years (SD = 10.23; 95% CI 37.04 – 39.62).

In VACCS 2, 1135 HPV-kits were distributed, and 158 (13.9%) tests were performed.

Table 1: screening results for VACCS 1 and 2

	VACCS 1		VACCS 2	
Tested	N = 253		N = 158	
Negative hr HPV	161	63.6%	114	72.1 %
Positive 16 and or 18	22	8.7%	15	9.5 %
Positive non 16/18 hr HPV	51	20.2%	27	17.1 %

Conclusion

Linking self-administered HPV testing for cervical cancer screening to vaccination against cervical cancer is feasible. Screening uptake as a percentage of available women was similar in the two studies using different recruitment methods.

ADJUVANT RADIOTHERAPY OF REGIONAL LYMPH NODES IN BREAST CANCER - A META-ANALYSIS OF RANDOMIZED TRIALS

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Background and aims: Radiotherapy (RT) improves overall survival (OS) of breast cancer patients after breast conserving surgery and after mastectomy in patients with involved lymph nodes (LN). The contribution of RT to the regional LN to this survival benefit was poorly understood. Recently, the results of three large randomized trials addressing this question have become available.

Methods: The published abstracts (full publication pending) of the MA.20 (n=1832) and the EORTC 22922--10925 (EORTC) (n=4004) trial and the full publication of the French trial (n=1334) were basis of the meta-analysis. Main eligibility criteria were positive axillary LN (all trials), LN negative disease with high risk for recurrence (MA.20), and medial/central tumor location (French, EORTC). The MA.20 and the EORTC trial tested the effect of additional regional RT to the internal mammary (IM) LN and medial supraclavicular (MS) LN, whereas in the French trial all patients received RT to the MS-LN and solely RT to the IM-LN was randomized. Primary endpoint was OS. Secondary endpoints were disease-free survival (DFS) and distant metastasis free survival (DMFS).

Results: Regional RT of the MS-LN and the IM-LN (MA.20 and EORTC) resulted in a significant improvement of OS (Hazard Ratio (HR) 0.85 (95% CL 0.75 - 0.96)). Adding the results of the French trial and using the random effects model to respect the different design of the French trial, the effect on OS of regional radiotherapy was still significant (HR 0.88 (95% CL 0.80 - 0.97)). The absolute benefits in OS were 1.6% in the MA.20 trial at 5 years, 1.6% in the EORTC trial at 10 years, and 3.3% in the French trial at 10 years (not significant in single trials). Regional radiotherapy of the MS-LN and the IM-LN (MA.20 and EORTC) was associated with a significant improvement of DFS (HR 0.85 (95% CL 0.77 - 0.94)) and DMFS

(HR 0.82 (95% CL 0.73 - 0.92)). The effect sizes were not significantly different between trials for any end point.

Conclusion: Additional regional radiotherapy to the internal mammary and medial supraclavicular lymph nodes statistically significantly improves DFS, DMFS, and overall survival in stage I-III breast cancer.

IGCS-0259
Breast Cancer

INTRAOPERATIVE ELECTRON RADIOTHERAPY DURING BREAST CONSERVING SURGERY OF BREAST CANCER

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Background: Intraoperative boost irradiation as part of breast-conserving therapy is a perfect method to adequately capture the high risk tumor relapse area. The most homogeneous dose distribution is achieved with electrons. Intraoperative radiotherapy (IOERT) as a boost for breast cancer releases a high single dose of radiation to the breast tissue; therefore acute toxicity is of particular attention. To date there is only inadequate information available on breast cancer patients treated with IORT using electrons applied as a boost. We therefore analyzed the acute toxicity and late side effects after radiotherapy with 10 Gy as a boost with a minimum follow-up of 3 months

Methods: A total of 385 patients treated with IOERT (10 Gy with 5, 7 and 9 MeV electrons) with a dedicated robotic linac (NOVAC 7, New Radiant Technology, Aprilia, Italy) to the tumor bed during breast-conserving surgery as a boost followed by whole-breast radiotherapy (WBRT,50- 50.4 Gy; 1.8-2 Gy per fraction) were included in this study. All patients underwent a retrospective follow-up regarding acute side effects and late side effects. Toxicities were documented using the common toxicity criteria (CTC 4.0 of the European Organization for Research and Treatment of Cancer).

Results: The IOERT was well tolerated and the cosmetic results were good. As a side effect there were five patients with seroma. Two patients developed a secondary wound healing. Two patients developed chronic pain in the irradiated breast. Ten patients developed a grade 2 fibrosis. The remaining patients did not develop any grade 3 or 4 side effects. The observed toxicity rates were not influenced by age, tubus size, electron energy or systemic

therapy. 80 patients had a follow up longer than 5 years. Three of them developed distant metastasis and one patient died.

Conclusions: After IOERT of the breast using electrons we did not find any unexpected acute and late toxicity rates.

IGCS-0279
Breast Cancer

ANDROGEN RECEPTOR EXPRESSION IN TRIPLE NEGATIVE BREAST CANCER.

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Background: About 15%-20% of breast cancers are triple negative (TNBC), and have poor prognosis. Significance of androgen receptor (AR) expression in TNBC is unclear. Retrospective analysis of AR status in TNBC patients, treated from 2004 to 2011, was done and their disease profile was assessed.

Methods: Details of all TNBC patients, who had follow up till 2011, and whose pathological slides and blocks were retrievable, were analysed for AR status.

Results: 316 TNBC patients were treated. 149 had follow up till 2011. Pathological slides and blocks were retrievable for 72. Slides were reviewed for AR status using AR Monoclonal (F.39.4.1) Mouse, IgG1, Kappa (AM-256-10ME) reagent and SS-Polymer-SRP detection kit DAB (QD-400-60KE). Nuclear expression >10% was taken as nuclear positive. Three had nuclear AR expression and six, isolated cytoplasmic expression. Both were analysed. Mean follow up was 52.53 months. Five year progression free survival (PFS) for AR negative was 80.41% and for AR positive, 75%. Two of the three nuclear positive patients fared poorly. Median PFS was 19.93 months. Cytoplasmic positive group were disease free at the end of follow up, though the significance is unclear. Pre-menopausal, AR positive patients had five

year PFS of 83.3%. Post-menopausal group had median PFS of 19.93 months. Higher grade had less AR expression. Node positive had 5 year PFS of 60%.

Conclusion: AR expression was associated with post-menopausal, low grade, node positive TNBC and is probably a promising target for this small subset of patients, where tailored treatment options could be considered.

IGCS-0245
Breast Cancer

ACUTE AND CHRONIC POSTOPERATIVE PAIN AFTER BREAST CANCER SURGERY IN BULGARIAN PATIENTS. RELATION WITH PREOPERATIVE ANXIETY, DEPRESSION AND FATIGUE

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Background: Before scheduled surgery, breast cancer patients frequently experience high levels of distress. Moreover, previous literature has supported the view that pre-surgery distress might be predictive of post-surgery outcomes. The purpose of the study was to test the contribution of brief psychological intervention, fatigue, anxiety and depression on acute and chronic postoperative pain in radically operated breast cancer patients.

Methods: Female patients (n = 129) undergoing radical breast cancer surgery were recruited to a randomized prospective study. The intervention group received brief psychological intervention (45-60 min) including education in pain assessment and management, whereas the control group received usual care. Fatigue, anxiety and depression (HADS and Zung scale) were measured at baseline. Pain was evaluated at baseline (VAS), in early postoperative period (VAS) and three months later (brief McGill questionnaire).

Results: There were no significant effects of the psychological intervention on acute and chronic pain. Apparent was a strong negative correlation between age and acute pain (- 0,52), age and chronic pain (- 0,47), age and depression (- 0,52), age and anxiety (- 0,57). There was a positive correlation between depression and chronic pain (0,52), chronic pain and usage of additional painkillers in early postoperative period (0,62), chronic and acute postoperative pain (0,74).

Conclusions: Acute and chronic pain continues to be an outstanding issue. It is strongly related to preoperative fatigue, anxiety and depression, but do not improve after brief psychological intervention. In order to prevent chronic pain, acute postoperative pain must be treated promptly and decisively.

IGCS-0281
Breast Cancer

HORMON RECEPTOR EXPRESSION AND CLINICOPATHOLOGIC FEATURES IN MALE AND FEMALE BREAST CANCER

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Abstract

Male and female breast cancers were investigated for variation in the clinicopathologic characteristics and expression of steroid hormone receptors in the northeast of Iran. Tumor specimens of 17 males and 338 females with breast cancer were collected at the hospitals of Mashhad University of Medical Sciences. Immunohistochemical expression of hormone receptors and Clinicopathologic features of breast cancer were compared between two groups. The mean age in men was 15 years higher than women ($P = 0.000$). Males and females were mainly in stage II and III respectively ($P = 0.007$). Although more than 60% of male and female patients were grade II, the respective figures for grade I and III were 25% and 12.5% in men but 7.1% and 27.2% in women respectively ($P = 0.025$). ER was significantly more positive in men against women; 82.3% versus 53.4% ($P = 0.016$). The related measures for PR was 58.8% and 50.3%, respectively ($P = 0.424$). Males also showed significantly more ER expression than post menopausal females ($P = 0.01$). Breast cancer in males and females contrasted in age at diagnosis, histological type, stage, grade and ER expression which emphasize they are separate diseases with different behaviors.
Keywords: Male, Breast carcinoma, Steroid Receptor, Stage

IGCS-0294
Breast Cancer

EFFICACY AND SAFETY PROFILES OF PEGFILGRASTIM (P) AND LENOGRASTIM (L) IN NON METASTATIC BREAST CANCER (NMBC) PATIENTS RECEIVING ADJUVANT FEC100

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Background and aims: neutropenia (N) is common in patients receiving chemotherapy. In literature higher incidence of G3/G4-N was reported in first chemotherapy cycle. Febrile-N (FN) is associated with significant morbidity and mortality. Retrospectively, we evaluated efficacy and safety of single injection of P (6 mg) compared with daily L (263 µg) in primary prophylaxis of N, in NMBC and chemotherapy-naïve patients receiving adjuvant FEC100.

Methods: 35 women (median age 54 years) underwent 6 cycles of chemotherapy. At every cycle, 17 patients received daily L from day 5 to 9 (5 total injections), while 18 patients received one dose of P on day 2. Incidence of N, FN and bone pain (NRS >7) were evaluated.

Results: in overall population incidence of N was 66%, while G3/G4-N was 54%. In P arm, N was 50%, all G3/G4-N. In L arm N was 82%, of which 58% was G3/G4-N. One case of FN occurred in P arm. During first cycle, incidence of G3/G4-N was 33% and 41% in P and L arms, respectively; no G3/G4-N occurred during the last cycle. Incidence of bone pain was 11% in both arms. Chemotherapy reduction occurred in 50% and 29% in P and L arm, respectively.

Conclusions: in our experience, a single injection of P was more effective than 5 daily administration of L, in particular for G3/G4-N incidence, also during first cycle. More dose

reduction was made in P arm. The safety profiles of P and L were similar with the same incidence of bone pain.

IGCS-0293
Breast Cancer

BODY MASS INDEX (BMI) AND AMENORRHEA IN PREMENOPAUSAL BREAST CANCER PATIENTS (PBC) TREATED WITH ADJUVANT ANTRACYCLINE AND CYCLOPHOSPAMIDE CHEMOTHERAPY (CT)

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Background and aims:

Amenorrhea often occurs during chemotherapy and it may reduce fertility and cause menopausal symptoms. The purpose of this study was to determine the incidence of CT-related amenorrhea (CRA) among breast cancer patients following adjuvant chemotherapy and the influence of their BMI.

Methods:

In this retrospective study we evaluated 18 PBC patients (pts), 43 median age years, treated with 6 cycles of adjuvant anthracycline-cyclophosphamide. BMI was evaluated in all women. Overall population (OP) had regular menstrual cycle (MC) and nobody began hormone therapy, at the same time.

Results:

Fifteen pts (83%) experienced amenorrhea during CT; the interruption of MC appeared during the first three cycles of CT in about 67% of pts and particularly 4 pts (27%) after 1 cycle, 4 pts (27%) after 2 cycles, 2 pts (13%) after 3 cycles e 5 pts (33%) in subsequent cycles. In OP, 14 pts (78%) had BMI<24.9 and 4 pts (22%) had BMI>25. MC reappeared at

the end of CT in only 2 pts (13%), with a median age of 43 years and BMI<24.9. Three pts (17%) have not amenorrhea during CT; the median age was 34 years and BMI<24.9.

Conclusions:

In our small experience CRA occurs very frequently. Its incidence and persistence was higher in patients older than 40 years than in younger patients. BMI did not influence occurrence of amenorrhea.

IGCS-0246
Cervical Cancer

FREQUENCY AND PATTERN OF GYNAECOLOGICAL CANCERS IN FEDERAL TEACHING HOSPITAL, ABAKALIKI, NIGERIA.

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Background;Gynaecological cancers are common in our low resource setting and areamong the leading causes of cancer related deaths worldwide.

Objective;The objective of this study was to determine the pattern and relative frequencies of gynecological cancers as seen at the Federal Teaching Hospital Abakaliki, Nigeria.

Method; A 2-year retrospective study of female genital tract malignancies was conducted at the Federal Teaching Hospital Abakaliki. The case notes of patients admitted for female genital tract malignancy between January 1, 2012 and December 31, 2013 were retrieved from the ward admissions and discharge books and the operating theatre record books. The data were analyzed using IBM SPSS statistics 20 and the results expressed in descriptive statistics by simple percentages.

Result; A total of 1178 women were seen during the study period, while 99 were found to have gynecological malignancy. The proportion of gynecological malignancies was 8.4%. . Majority of the patients were in the fifth and sixth decades of life, most (60.6%) had cervical cancer, followed by ovarian cancer (19.2%), endometrial cancer (10.1%)vulva cancer(7.1%)and the least was choriocarcinoma (3.0%). Tumors of fallopian tube and vagina were not seen during the study period.

Conclusion; Despite the preventable nature of cancer of cervix, it remained the most common female genital tract malignancy in Abakaliki, South-East Nigeria. Education and

public enlightenment on the importance of routine screening and treatment of premalignant lesions of the cervix are necessary tools to reduce the incidence and mortality of cervical cancer

IGCS-0270
Cervical Cancer

GYNECOLOGICAL CANCER SERVICES IN ARAB COUNTRIES: PRESENT SCENARIO, PROBLEMS AND SUGGESTED SOLUTIONS

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Gynecological malignancies account for 9% of all female cancers worldwide. In the Arab countries Breast cancer is the leading cancer in women followed by cervical cancer. Ovarian cancer ranks as fourth leading cancer in women. There are huge differences in the available resources among Arab countries. However the challenges facing the provision of gynecological cancers services shared similarities like the cultural and religious background. Most of the gynecological cancers are diagnosed at a later stage in Arab countries due to the lack of reproductive health awareness especially among older women combined with the cultural stigma of seeking medical advice for gynecological symptoms. This article discusses the current situation of gynecological cancer services in Arab countries and suggests some practical solutions.

IGCS-0297
Cervical Cancer

THE LEARNING CURVE OF MANAGEMENT OF PRE-MALIGNANT LESIONS OF THE CERVIX FOLLOWING ON-LINE TRAINING COURSE

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Background and aims:

Cervical cancer remains a public health concern in developing countries. Screening for premalignant cervical lesions and offering definitive treatments for identified cases form part of the continuum of the prevention of cervical cancer. These skills require appropriate training through a well-organized course.

Methods:

We conducted an audit of the colposcopy and Loop electrosurgical excision procedure on account of premalignant lesions of the cervix at our centre between January 2012 and December 2013 following capacity-building through IFCPC-AORTIC on-line distance learning colposcopy course.

Results:

Thirty-seven women aged 28 to 54 years had colposcopy and cervical biopsy on account of either persistent low grade squamous intraepithelial cervical lesion (10) or high grade squamous intraepithelial cervical lesion (27) on Pap smear. The colposcopy biopsy results were concordant with the Pap smear results in 77.1% of the available 35 results. There were 3 cases of CIS two of which had hysterectomy and one had LEEP. Of the available 24 LEEP specimen histology results, 83.3% were concordant with the colposcopy biopsy results. Ten of the available 11 (90.9%) Pap smear results 6 months post-LEEP or hysterectomy were normal with a case of CIN I after a LEEP for CIN II from colposcopy biopsy result.

Conclusions:

On-line competency-based training on colposcopy and management of premalignant lesions of the cervix is feasible. This is particularly relevant in resource limited setting like ours where resources for onsite training are limited. This can, also, facilitate the transfer of skills acquired from such training locally.

IGCS-0242
Cervical Cancer

EPIDEMIOLOGY AND SCREENING OF CERVICAL CANCER OF RURAL WOMEN AND URBAN COMMERCIAL SEX WORKER IN SELECTED AREAS OF BANGLADESH

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Background and aims

A cross-sectional survey was undertaken to estimate prevalence of precancerous cervix (PCC) using VIA, colposcopy and detection of HPV DNA in rural women and urban female commercial sex worker (CSW) in selected areas of Bangladesh.

Methods:

Seven hundred and seventy seven women were screened using VIA, 65 highly VIA positive women were subjected to colposcopy. The oncogenic Human papillomavirus (HPV) DNA was tested in 141 rural women; and 109 urban female CSW using HPV DNA Hybrid Capture 2 assay. A pre-tested questionnaire based data on potential risk factors were also collected from every women. Data were entered in Microsoft excel 2003 and transferred to R version 3.0.1 for statistical analysis.

Results:

The median age of rural women was 35 years whereas the median age of urban female CSW was 30 years. The overall prevalence of PCC based on VIA was 11.1%. The prevalence of PCC was relatively higher in rural women (11.8 %) than urban female CSW (6.45%). But the prevalence of HPV DNA positive CSW (33.1%) was higher than in rural women (9.3%). About 50.8% (33/65) VIA positive women were colposcopy positive. Association of PCC with potential risk factors were analyzed.

Conclusions:

This study described the prevalence of PCC in rural women and urban female CSW in selected areas of Bangladesh. The prevalence of PCC based on VIA is relatively higher in rural women than that of urban female CSW. But the prevalence of HPV DNA positive CSW is higher than in rural women.

IGCS-0252
Cervical Cancer

IMAGE GUIDED BRACHYTHERAPY FOR CARCINOMA OF THE CERVIX: ASSESSING THE OPTIMAL NUMBER OF MRI SCANS

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Background and aims

Recent evidence, including GEC-ESTRO recommendations and RCR WP report, supports the use of MRI based image-guided brachytherapy (IGBT) for cervical cancer for all fractions of brachytherapy. However, in practice this is difficult to achieve because of restricted access to the MR scanner.

The purpose of this study was to determine whether it is necessary to carry out an MRI scan for each of the three fractions of brachytherapy.

Methods

All patients were planned and treated using co-registered CT/MR scans. For the purpose of this study, EQD2 doses to HR-CTV and organs at risk were calculated for CT based plans and compared to the CT/MRI based plans.

Results

Initially, we measured the difference in volumes of organs at risk (OAR) outlined on MRI and CT scan. We found that although, OAR volumes were generally larger on CT scan, statistically significant difference was only noted for rectal volume. We also calculated the total dose in 2 Gy per fraction (EQD2) for HR-CTV and organs at risk for the original MRI based plans and new CT based plans. All plans were within the dose limits suggested by the EMBRACE trial. However, treatment planned using CT outlining showed statistically higher dose to the sigmoid.

Conclusions

The proposed approach delivers adequate dose to the target volume while keeping the dose to the organs at risk within tolerance limits. However, at CCC we continue to use MRI scans for all three fractions of brachytherapy.

IGCS-0262
Cervical Cancer

PREIRRADIATED CERVICAL SQUAMOUS CARCINOMA INVASIVE IN THE RIGHT URETERO-VESICAL JUNCTION - RADICAL HYSTERECTOMY EN BLOC WITH DISTAL URETERECTOMY AND REIMPLANTATION

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We present the case of a 66 years old patient diagnosed with no keratinized squamous moderate differentiated cervical cancer. The initially CT scan showed a proliferative uterine process with parametrial invasion and amprentation of the urinary bladder and right common iliac adenopathy. The patient underwent curietherapy. The imagistic reevaluation performed 4 weeks after completion of radiotherapy showed considerable dimensional reduction of the cervical tumor. The cystoscopy showed normal bladder mucosa. Intraoperatively we found tumoral infiltration of the last 2 cm of the right ureter. We performed a radical hysterectomy en bloc with right distal ureterectomy and uretero-vesical reimplantation. The postoperative evolution was uneventful.

IGCS-0322
Cervical Cancer

AN UNUSUAL CERVICAL TUMOR AS PRESENTATION OF A NON-HODGKIN LYMPHOMA

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Rare cervical cancers are responsible for a minority of cases encountered by a clinician. However, behavioral patterns, management, and prognosis of certain rare cervical cancers differ from either squamous carcinomas or adenocarcinomas.
Here we present a case of a locally advanced cervical tumor as a presentation of an extranodal cervical non-Hodgkin lymphoma (NHL), with a review of the current literature. Cervical extranodal NHL is an uncommon disease that provides clinicians with a diagnostic challenge. The diagnosis is difficult to be made and is often delayed because of its rarity, its low rate of suspicious findings, and the normal cervical smear. It is critical that clinicians, radiologists, and pathologists have awareness for this rare disease. If diagnosed and treated without delay and in an early stage the prognosis of cervical extranodal NHL is significantly better compared with the prognoses of the more common squamous cell carcinomas of the cervix, thus making a correct and swift diagnosis crucial.

IGCS-0257
Cervical Cancer

EVALUATION OF EQD2 THRESHHOLDS FOR PREDICTING LATE RECTAL TOXICITY FOLLOWING CHEMO RADIATION AND INTERSTITIAL BRACHYTHERAPY FOR CERVICAL CANCERS.

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Background:

The present study was conducted to define thresholds for rectal sub volumes in equivalent doses of 2 Gy (EQD2) for predicting late toxicity in women undergoing chemoradiation (CRT) and pelvic interstitial brachytherapy (IBT) for vault cancers.

Methods and Materials:

From Oct 2009- Nov 2012, 50 patients undergoing CRT and IBT were included. All patients received conformal or image guided intensity modulated radiation (50 Gy/25 #/5 weeks). CT based IBT planning was done and all received 20 Gy/ 5#/ 3 days. The dose received by 0.1cc, 1cc, 2cc, 5 cc volume of rectum, RM and sigmoid was obtained. EQD2 of RT and IBT was calculated and toxicity was scored using CTCAE.

Results:

The RM received 69.8 Gy (57.4-151.8), 64.4 Gy (55.6-116.6), 61.8 Gy (54.5-102.5), 58 Gy (50-82.6) to 0.1 cc, 1 cc, 2 cc and 5 cc volumes. On median follow up of 21 months (12-45) grade II rectal toxicity was observed in 20% (10/50) and grade III in 6% (3/50) of patients. On univariate analysis only RM dose of 0.1cc < 72 Gy (p= 0.02), 1cc < 65 Gy (p= 0.012), 2cc < 63 Gy (p= 0.012), 5cc < 60 Gy (p= 0.02) predicted for absence of grade II toxicity. Restricting the rectal mucosal doses to proposed dose levels can reduce the incidence of grade II and III proctitis to less than 15% and 5% respectively.

Conclusions:

Doses received by RM rather than whole rectum predict for late grade II or higher toxicity in patients undergoing MUPIT for vault recurrences.

IGCS-0248
Cervical Cancer

TRIAGE OF PATIENTS WITH EARLY CERVICAL CANCER BY CLINICAL AND PATHOLOGICAL RISK FACTORS MAY REDUCE THE RATE RADICAL HYSTERECTOMY

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Aim: To suggest criteria for triage of patients with early cervical cancer in whom the risk of parametrical involvement (PI) is negligible to simple hysterectomy or to offer primary chemoradiation for patients who have a high probability of receiving postoperative adjuvant chemoradiation (POACR).

Methods:

A multicenter study of 601 patients with stage IA2- IIA cervical cancer, who underwent primary RH and pelvic lymphadenectomy. Abstracted clinical and histological data were incorporated into a flow chart algorithm, quantifying the frequency PI or POACR

Results: In patients who were both node negative and had tumors ≤2cm PI was present 3/146(2%). No PI was present in the107 patients who were node negative, had tumors ≤ 2 cm and had no lymph-vascular space invasion (LVSI). 294 (57.2%) patients that received POACR; 53% of these patients who were treated by POACR had only intermediate risk

factors. Combining intermediate risk criteria, we found that 89% of patents with tumors ≥ 2cm and LVSI received radiotherapy, 76% of patients with tumors ≥ 2cm and depth of invasion > 10 mm received radiotherapy, and 87% of patients with tumors depth of invasion > 10 mm and LVSI received POACR.

Conclusion: This study suggests that in patients with early cervical cancer clinical-pathological evaluation of tumor size, LVSI and nodal status should be undertaken prior to performing RH. Triage of patients according to a suggested flow chart may limit the role of radical hysterectomy

IGCS-0298
Cervical Cancer

EVALUATION OF SCCAG IN CERVICAL CANCER

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Abstract:

Introduction: Cervical carcinoma is the second most common cancer among women and is the leading cause of death due to female genital tract cancers. In our geographic region, cervical cancer is the most common malignancy in women. SCCAg is among prognostic factors for cervical cancer, which in several studies from times before, its correlation has been demonstrated with pathology, stage, grade and size of tumor and lymph node involvement .But to now, such study has not been performed in Iran.

Objectives: to investigate frequency of SCCAg in blood samples from cervical cancer patients. Also to evaluate correlation of SCCAg levels with age, pathology of tumor, stage and grade of tumor.

Material & method: during 1382-1385 period ,patients referred to oncology center of Qaem hospital in mashhad were included in the study if the treatment had not yet been commenced and also provided there were no other squamous cell carcinomas in other parts of body.Then a thorough history was taken ,questionnaire filled and pretreatment serum SCCAg levels were measured by RIA.

Results: 29 patients possessed criteria of our study (at the beginning 31 patients entered the study). Average age of patients was 50.9 years. The most common presenting sign was bleeding in 16 patients (94.1%).18 patients (60%) were in stage II and 16 patients (66.6%) had grade 1 tumor, and 18 patients (62.1%) had positive levels for SCCAg with the average of 9.84 ng/ml and median of 7 ng/ml and according to primary evaluations, there was no statistically significant difference with age,grade,stage and type of pathology.

Key words: frequency, cervical carcinoma, serum SCCAg

IGCS-0249
Cervical Cancer

TREATMENT OUTCOMES IN CERVICAL CANCER PATIENTS STAGE IB1 AFTER SURGICAL AND RADIOSURGICAL THERAPY

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Objective: To establish the overall survival (OS) and disease-free survival (DFS) in women with cervical cancer staged IB1 according to FIGO and submitted to surgical and combined(surgical and postoperative radiotherapy-RT) treatment.

Material and methods: Between 2002 and 2012, 132 patients diagnosed as IB1 stage according to FIGO criteria were enrolled in the study. The median age was 49,33(ranged from 27 to 75) years. The median follow-up period was 44 (ranged from 1 to 114) months. All patients were surgically treated in one center- Gynecological clinic, St. Anna'-Varna hospital. Ninety three patients were submitted to adjuvant RT-telegamma therapy (TGT) in dose 52 Gy.Surgery was radical hysterectomy class III and pelvic or paraaortic lymph node dissection (in cases of bulky paraaortic nodes). OS and DFS were estimated by Kaplan-Meier method.

Results: Three-,five- and nine-years DFS were 83%,82% and 82%,respectively.The incidence rate of relapses was 14,4%,19 women relapsed(5-3,8% local recurrences; 12-9,1% distant metastases; 2-1,5% local and distant metastases).

One-,three-,five- and nine-years OS were 97%.86%,83%,81%,respectively. Seventeen out of 132 (12,9%) women died and 14 (82,4%) of deaths occurred in the first 36 months of follow-up.

Conclusion: Distant metastases are the most common cause of treatment failure in early cervical cancer patients.Relapses occurred more frequently in the first 24 months after treatment.

IGCS-0237
Cervical Cancer

DOES ADJUVANT RADIOCHEMOTHERAPY IMPROVE SURVIVAL IN EARLY STAGE CERVICAL ADENOCARCINOMA PATIENTS INITIALLY TREATED WITH SURGERY?

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Objective
To retrospectively assess the efficacy of postoperative radiochemotherapy in FIGO stage I cervical adenocarcinoma (AC) patients.

Methods/materials
After surgery treatment, 33 patients with cervical AC (FIGO I) were assigned to two treatment groups, either observation +/-brachytherapy (BT) alone or BT combined with radiochemotherapy, according to the presence of risk factors in the histopathology protocol. Surgical procedures included radical hysterectomy (RH), pelvic lymphadenectomy and bilateral salpingo-oophorectomy. Seven (21,2%) patients were found to have lymph node metastasis, 21 (63,6%) deep stromal invasion (DSI), 4 (12,1%) parametrial invasion and four (12,1%) lymphovascular space invasion (LVSI).

Results
The median age was 50 years (range: 23-75). The median follow-up after treatment was 65 months (range: 4-112 months). Recurrence developed in five (15%) of the 33 patients, three died of the disease. Two of five (40%) recurrences were outside the pelvis. Five-year disease-free survival (DFS) for patients treated with RH +/- BT and RH-EBRT-CHTH-BT was 90,9%, (Standard Error (SE) 8.67, 95% Confidence Interval (CI) = [50,8-98,67]), and 72,2.%,

(SE 9.75, 95% CI=[48,03 – 86,58]), respectively. The difference was not statistically significant (p>0,1).

Five-year overall survival (OS) for patients treated with RH +/- BT only and RH-EBRT-CHTH was 90,9% (SE 8.67, 95% CI=[50,81-98,6]), and 90,6%, (SE 90.62, 95% CI=[63.4-67,3]), the difference was also not statistically significant (p>0,1).

Conclusion
Adjuvant radiochemotherapy in patients with early stage AC of the cervix with risk factors causes the alignment of survival rate to the level achieved in patients with no risk factors.

IGCS-0318
Cervical Cancer

A RARE PRESENTATION OF FAMILIAL PRIMARY GASTRIC CARCINOMA MASQUERADING AS CANCER OF CERVIX
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Introduction: Metastatic cancers of cervix, except from uterus are rare. It is extremely rare clinical presentation of metastatic Familial Gastric Carcinoma masquerading cervix carcinoma .

Case Summary: A 45 years lady presented with complain of bleeding per vaginum and severe pain on left lower limb and lumbo-sacral region since 1 ½ months. She was referred for expert opinion on appropriate management with reports of cervix punch biopsy, MRI and sonography. Histopathology it was adeno-carcinoma. Sonography and MRI showed cervix growth and lemon sized left adnexal mass. Tumor markers were normal and FNAC of adnexal mass was inclusive. Clinically it appeared FIGO stage IIA Cervix Carcinoma.

On further examination an orange sized, hard nodular left breast lump was detected. FNAC was inconclusive. Mammography reported Bio-Rad III/IV. True cut biopsy confirmed primary Gastric carcinoma metastasizing to the left breast. PET-CT reported Gastric carcinoma with FDG examination can many prevents many inadvertent mismanagements.avid metastasis at multiple sites, including cervix, left ovary, right breast, ascending colon and in nearby draining lymph nodes of stomach. Gastroscopy and gastric biopsy from ulcerative growth further confirmed diagnosis of advanced metastatic Primary Gastric Carcinoma .

When, patient was counseled about poor prognosis, she stated that her sister and brother had died of Gastric cancer in past.

Conclusion:

An obvious clinical diagnosis may be misleading. A thorough clinical history and examination may avoid inadvertent mistakes.

IGCS-0239
Cervical Cancer

REPRODUCTIVE OUTCOME AFTER CONE BIOPSY IN A LOW RESOURCE SETTING IN NIGERIA

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Objective: To evaluate the impact of cone biopsy on subsequent reproductive performance in women.

Methods: It was a prospective study. Eighty two women underwent cone biopsy at our hospital from January 2008 – December 2010.Sixty nine women had regular follow-up at our hospital till December 2013.Fertility rates after cone biopsy in the study population were compared with carefully selected group of matched controls of similar age and parity. One way analysis of variance was used to compare the prevalence of spontaneous abortion rates, preterm labour rates and caesarean section rates.

Results: Women who had cone biopsy had higher rates of spontaneous mid trimester abortions and preterm labour which was significant. Women who had mid trimester abortions, had higher incidence of cervical cerclage insertion in their subsequent pregnancies and those with preterm labour had higher incidence of low birth weight babies and most babies required intensive neonatal care. However the caesarean section rates in women that had cone biopsy were not significantly different from the matched controls.

Conclusion: Cone biopsy has both diagnostic and curative advantages, however it is a mutilating procedure that may undermine the functional competence of the cervix during subsequent pregnancies.

These data reinforce the strong case of treating young women with positive smears conservatively and give priority to providing colposcopy services throughout the country.

IGCS-0244
Cervical Cancer

IDENTIFICATION OF PUTATIVE BIOMARKERS FOR CERVICAL CANCER DIAGNOSIS

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Background and Aims: Cervical cancer is global public health problem responsible for approximately 300,000 deaths annually. It is the commonest female genital tract malignancy in South Africa. It is preventable by routine screening targeted at detecting premalignant and early invasive lesions, unfortunately such programmes are not very effective in South Africa. The diagnostic techniques utilized are invasive and in some instances lack the required sensitivity. Diagnostic devices that scrutinize bodily fluids such as blood and urine for disease biomarkers are desired for cost effective early diagnosis with minimal invasiveness. The purpose of this study is to identify proteins that become differentially expressed in the cervix tissues during cervical cancer development.

Methods: A Bioinformatics approach was used to identify putative biomarkers from raw data to aid in discovering genes/proteins implicated in the development of cervical cancer. Multiple gene enrichment analysis tools were employed to analyze the selected candidates. The putative biomarkers will be further analyzed by qRT-PCR and western blot. Furthermore, protein expression will be assessed in serum samples of cervical cancer patients. This will be done by either ELISA or Western blot analysis.

Results: 10 genes/proteins were identified as possible putative biomarkers for cervical cancer and they were all predicted to be regulated by the transcription factor PPARγ and interacted with PCNA, while 8 were predicted to be modulated by C/EBP and p53.

Conclusion: This research is currently on progress in the quest to develop a point-of-care device for early diagnosis of cervical cancer.

IGCS-0316
Cervical Cancer

IS AGE OF 30 YEARS RECOMMENDED FOR COMMENCEMENT OF CERVICAL CANCER SCREENING IN DEVELOPING COUNTRIES JUSTIFIED?

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Background: The pickup rate of precursor lesions for cervical cancer increases with age. Screening from age of 30 years has been recommended by WHO in developing countries because of economic reasons and the fact that it takes up to 10 to 15 years for the premalignant lesion to progress to invasive lesion.

Objectives: To determine the prevalence of premalignant lesions of the cervix with respect to age so as to justify the WHO recommendation.

Method: A cross sectional study of 409 consenting women in a community in South-South Nigeria were screened cytologically for premalignant lesions of the cervix using Pap cone, a product of Ottobock from Germany. Analysis was done using Epi-info 2008 version 3.5.1.Result**:** Of the 409 cases, 30 were excluded from analysis because of incomplete data. The mean age of the respondents was 47.1, SD = 12.7. Atypical squamous cell of undetermined significance (ASCUS)/ low grade squamous intra-epithelial lesion (LSIL) was detected in 136 (35.9%) and high grade squamous intra-epithelial lesion (HSIL) in 16 (4.2%). The largest proportion of abnormal PAP smear were in the age group of 50- 59years-ASCUS/ LSIL (10.6%) and HSIL (1.8%). The HSIL was same (0.5%) for 30-39 and 40-49years, and 0.3% for 20-29years, while the prevalence of ASCUS/LSIL was 6.5% and 7.9% for 30-39 and 40-49 years respectively and 2.1% for 20 -29years. Overall results of age distribution by cytology method suggest a significant (X^2 =13.52, _P_=0.03) relationship**.**

Conclusion: The WHO recommended age of 30 years for commencement of cervical cancer screening still seems plausible. Randomized controlled studies in developing countries are needed to justify it.

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IGCS-0238
Cervical Cancer

THE ACCEPTABILITY OF HUMAN PAPILLOMA VIRUS VACCINATION AMONG WOMEN IN UNITED ARAB EMIRATES

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Background and aims: Human papilloma virus (HPV) is a common sexual transmitted infection. It is estimated that 10% of all women are infected with HPV. The burden of HPV infection is huge. 660 millions are infected with HPV each year all over the world. HPV vaccines have reported efficacy of more than 98% for protection against cervical cancer in females. In 2008 the Abu Dhabi Health Authority in United Arab Emirates (UAE) introduced the HPV vaccine free of charge to all eligible schoolgirls both in public and private schools. The objectives of this study were to assess the acceptability of HPV vaccine among women in the UAE and factors affecting it

Methods: cross-sectional study of 640 women aged 18-50 years in Emirate of Abu Dhabi in UAE from April 2012 to October 2012.

Results: Thirty seven percent of females have ever heard about HPV vaccine. Eighty percent of those who have heard about HPV would consider taking the vaccine themselves and 87% would recommend the vaccine for relatives or friends. The majority of the studied women thought the vaccine is good 69%. Only seventeen percent of our sampled women thought it might not be culturally acceptable and 1% thought that there might be religious objection to the HPV vaccination. Vaccine safety and recommendation by doctor (36% each) were the top factors which would enhance the uptake of the HPV vaccine among our sample women.

Conclusion: The knowledge about HPV vaccine in our sampled women is below average (37%), however 80% of those who have heard about HPV vaccine were willing to be vaccinated themselves and 87% would recommend the vaccine to family and friends.

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IGCS-0255
Cervical Cancer

WAYS TO REDUCE CERVICAL CANCER RISK BY ADDRESSING PUBLIC HEALTH ISSUES IN LOW -RESOURCE SETTINGS

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Background and aims

Cervical cancer is partly associated with social and reproductive exposures in early life, often ignored in cervical cancer prevention. An objective of the present study was to assess risk factors for cervical cancer in women in Mozambique.

Methods

A hospital based case-control study compared 133 patients (cases) diagnosed with invasive cervix cancer at the department of oncology, with 120 age-matched patients (controls) free of any cervical malignancy at the department of gynaecology, the Central Hospital. Data were collected by standardised interviews conducted by nurses.

Results

Illiterate women had significantly excess risk of cervical cancer, odds ratio (OR) 17.8. Illiterate women were less likely to attend health education classes and to consult health professionals, and were subsequently diagnosed at a later stage than educated women. Between groups comparisons showed marked differences in reproductive history: the cases had significantly more often low sexual debut age < 15 years (OR 4.8), multiple >5 births and at an early age (OR 4. 0), >5 sexual partners (OR 5.7) and a history of gynaecological complaints.

Conclusion

Illiteracy, high parity, early sexual debut and motherhood, multiple sexual partners, and poor sexual hygiene, were all co-factors for cervical cancer. Education is an investment in general health and an important factor in cancer cervix prevention as women with some schooling are more likely to postpone childbearing, have fewer children, attend health education classes, and health services. Access to education and programs aimed at preventing unhealthy reproductive behaviour are ways to reduce the burden of cervical cancer.

IGCS-0254
Cervical Cancer

GREAT SIGNIFICANCE FOR TOXICITY EFFECT DEPENDS ON DIFFERENT DOSE TREATMENT PLANNING BRACHYTHERAPY CANCER CERVIX.

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Material and methods. Were studied the data about 485 patients with carcinoma of the uterine cervix IB-3B stage, who obtained the radiotherapy in «N.N. Petrov Research Institute of Oncology Ministry of Health», Saint Petersburg. For treating all patient was used the combine (EBRT + Brachytherapy) radiotherapy. Brachytherapy with HDR on «MicroSelectron HDR Ir-192» was underwent 485 patients with "Ring Applicator Sets" used. The mode for fractionating the summary target dose (STD): 7Gy, once a week, STD=28Gy (BEDe=48, BEDl=106). For the dose treatment planning brachytherapy cancer cervix in our department used Vienna method for 261 patients (First group). For the dose treatment planning brachytherapy 224 patients (Second group) we used modified Vienna method for individualized dose and volume adaptation based on standard ring applicators. This new method was registered by license? 2299081, May 20 2007, from Federal license foundation Russian Federation.

Results. The total number of acute toxicity among patients Second group treated with HDR brachytherapy substantially ($p < 0.05$) was 10% less in comparison with Fist group, due to the reliable ($p < 0.05$) decrease to 7% of a quantity early rectum toxicity. The total number of late toxicity among patients First group treated with HDR brachytherapy substantially ($p < 0.05$) was 6% more in comparison with Second group, due to a reliable ($p < 0.05$) increase in to 3% the quantity of late urinary bladder toxicity.

Conclusion. Quantity early and late toxicity substantially depend from method dose treatment planning brachytherapy for combine radiotherapy carcinoma of the uterine cervix.

IGCS-0272
Cervical Cancer

HPV TYPES ASSOCIATED WITH HISTOLOGICALLY CONFIRMED CIN II/III AMONG SOUTH AFRICAN WOMEN WITH AND WITHOUT HIV
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Background and aims: Data in Africa is lacking on the relationship between oncogenic human papillomavirus (HPV) types, immune status and cervical pre-invasive lesions. The aims included assessing HPV serotypes present in patients with biopsy-confirmed cervical intraepithelial neoplasia (CIN) and to compare HIV-infected- and -non-infected women and describing the prevalence of high-risk HPV types as immune function deteriorates, indicated by CD4 cell count and duration on antiretroviral (ARV) therapy.

Methods: In a cohort women with CIN II/III confirmed on histology, in an urban setting with a high prevalence of HIV infection, we report low-risk (lrHPV) and high-risk HPV (hrHPV) types found with the DNA analysis, CD4 count and ARV use.

Results: Among 270 women with confirmed CIN II/III, 45 were HIV-negative and 225 HIV-positive. HIV-infected women had significantly more HPV type infections, including all HPV (p<0.001) and hrHPV (p=0.014) types. The prevalence of one or more hrHPV type/s was 93.3% and 92.9% in HIV-negative and –positive patients respectively. Most prevalent hrHPV type among HIV-negative women was HPV 16, followed by HPV 52, -31, -35 and -58. Among HIV-positive women HPV 16 was followed by HPV 58, -35, -51 and -52. The prevalence and type distribution differed among women with CD4 count ≥200 and <200 as well as duration of ARV usage.

Conclusions: In South Africa, burdened by the HIV pandemic, high numbers of high- and low-risk HPV type infections are present in women with cervical pre-neoplasia. HPV type distribution differs among varying levels of HIV-induced immune depletion.

IGCS-0310
Cervical Cancer

INVOLVEMENT OF TOLL-LIKE RECEPTORS IN CERVICAL CANCER SUSCEPTIBILITY AMONG TUNISIAN WOMEN

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Background and aims: Previous studies underscored the importance of genetic factors in the pathogenesis of certain cancers, including cervical cancer. Epidemiological evidence supports an association between specific polymorphisms of Toll-like receptors (TLR) with several human pathological states, including cervical cancer. The aim of this study was to investigate the link between specific gene variants in TLR2 (-196 to -174 del), TLR3 (c.1377 C>T), TLR4 (Asp299Gly), and TLR9 (2848 G>A) and susceptibility to cervical cancer in Tunisian women.

Methods: Study subjects comprised 122 women with histopathologically-confirmed cervical cancer, and 260 unrelated age- and ethnically-matched healthy females, who served as controls. TLR genotyping was done using PCR-restriction fragment length polymorphism.

Results: The C/C genotype of TLR3 (c.1377 C>T) is associated with cervical cancer susceptibility (OR: 1.71, CI: 1.08-2.70). For TLR4 (Asp299Gly), the Asp/Asp genotype and the Asp allele were associated with higher risk of developing cervical cancer (OR: 4.95, CI: 1.97-13.22) and (OR: 5.17, CI: 2.11-13.50) respectively.

Conclusion: We demonstrated no association between the TLR2 (-196 to -174 del) and the TLR 9 (2848 G>A) polymorphisms and the susceptibility of cervical cancer among Tunisian women. However, the C/C genotype for the TLR3 (c.1377 C>T) polymorphism and the Asp/Asp genotype and the Asp allele for (Asp299Gly) TLR4 polymorphism were found to be associated with a higher risk of cervical cancer.

IGCS-0289
Cervical Cancer

COLPOSCOPY AFTER AN ABNORMAL PAP

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Background: Cervical cancer is preventable, although it is common and one of the leading causes of death among women. Colposcopy is secondary screening test used after a cytology is reported as abnormal. A normal colposcopy is not an infrequent outcome, and clinicians need to be aware of the clinical value of satisfactory colposcopic assessment. Normal colposcopy can decrease patient's anxiety and physician's problem.

This study determined value of normal colposcopy after an abnormal pap smear in referral patients to Shahid Beheshti hospital from November 2010 to December 2012.

Methods: We designed a diagnostic clinical trial study to review all pap smear and pathology of cervix in patients with abnormal pap. The subjects included 334 women who underwent repeat pap, immediate colposcopy and punch biopsy of cervix. Cytologic evaluation was repeated in 6,12,18,24,months and colposcopy after one year., if normal, routine screening was resumed and a second abnormal smear (ASC_US or greater) was evaluated with colposcopy.

Results: Originally, 334 cases with a referral index cytology diagnosis of ASC_US;63.8%(n=213), LSIL;15.9% (n=53), HSIL;10.2% (n=34), ASC_H; 2.7% (n= 9), AGC; 6.6%, (n= 22), S.C.C ;0.9% (n=3).

They enrolled in the study.

Sensitivity of colposcopy was more at high grade lesions.

In this research sensitivity of colposcopy as diagnostic method was 82.6% , specificity 75.3% , positive predictive value (+PV)was 34.9% and negative predictive value (- PV) 96.4 %.

Conclusion: Negative predictive value of colposcopy is high and this diagnostic method is most reliable when is satisfactory and the findings are normal.
Dr.behnamfar,F. Dr.Zafarbakhsh,A.
OBGYN Department.Isfahan Medical Univercity. Shahid Beheshti Hospital.

Conflict of interest

IGCS-0315
Ovarian Cancer

PATTERNS OF PRESENTATION AND OUTCOMES OF GERM CELL TUMORS IN OMANI WOMEN

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Background: Germ cell tumors of the ovary arise from three germ cell layers: the ectoderm, the endoderm and the mesoderm. These tumors are classified as benign or malignant and can be unilateral or bilateral. Malignant tumors may present with metastases. The malignant tumors respond to chemotherapy, and have a good overall prognosis.

AIM: To study the patterns of germ cells tumors and obtain information about the presenting features, stage at presentation, histological sub-types, co-morbidities, treatment outcomes and survival.

METHODS: Consecutive female patients treated for germ cell tumors at the Sultan Qaboos University Hospital over the period of 2011 and 2012 were the subjects of the study. Data were extracted from the electronic health records, and filled into pre-designed questionnaires. Data were collected on demographic features, presenting symptoms, signs, and laboratory investigations, radiological patterns of involvement, treatment and outcomes of treatment. Analysis was done using SPSS version 19.0 and Kaplan and Meir method was used for survival analysis.

RESULTS: A total of 43 patients were identified from the database, and formed the subjects of the study. Thirty-three (77%) were benign mature teratomas (MT) and 50% patients had left unilateral ovarian involvement. Seventy perecent of patients presented with abdominal discomfort. The remaining ten cases were malignant and the commonest subtypes were immature teratoma and choriocarcinoma. Eight patients had high LDH levels and another 8 had a high B-hCG level. Only 4 patients had high AFP. The primary management for all the benign tumors was surgery. Malignant germ cell tumors were treated either with an initial surgery with combination of chemotherapy. The median follow up was 16 months and 3 patients died; one with recurrent and relapsing yolk sac tumor, one with primary refractory choriocarcinoma, and the last one with immature teratoma with squamous differentiation. The 2-year survival rate was 65%

CONCLUSION: The vast majority of germ cell tumors are benign, and were treated with fertility-sparing surgery. Of the malignant tumors, the 2 year survival rate was 65%

IGCS-0283
Ovarian Cancer

RELATION OF BMI AND SERUM TUMOR MARKERS TO CASES OF OVARIAN CANCER
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Background: The level of serum tumor markers, BMI and coexistence of metabolic syndrome show positive relation with the stage of ovarian cancer and mortality rate.

Methods: This study examines association between the stage and pre- treatment serum levels of tumor markers (CA125, HE4, ROMA), BMI and existence of obesity and metabolic syndrome in 156 postmenopausal patients with epithelial ovarian cancer.
Results: Serum levels of CA 125 above 600 mmol/l and HE4 above 100 pmol/l are most frequently found in advanced stage (II-IV) disease and thus appear to be in positive relation with ovarian cancer mortality. Highest values of BMI are also determined in advanced ovarian cancer. Obesity and coexistence of metabolic syndrome worsen survival rate in patients aged over 50.

Conclusion: CA125, HE4 and ROMA are informative and reliable biomarkers in advanced stage disease and in patients aged over 50. BMI is an important, modifiable host risk factor in ovarian cancer patients.

IGCS-0288
Ovarian Cancer

CHARACTERIZATION OF ERYTHROPOIETIN RECEPTOR ISOTYPES IN HUMAN OVARIAN ADENOCARCINOMA AND NORMAL ENDOTHELIAL CELLS

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Background and aims

Erythropoietin receptor (EpoR) is a member of the cytokin receptor family. Binding of erythropoietin (Epo) to its receptor activates the complex of Epo-EpoR which phosphorylates intracellular molecules. Epo is growth factor that promotes the viability, proliferation and differentiation of erythroid progenitors. Currently, there is no doubt about the presence of EpoR in cancer and normal cells but there are still many discrepancies in the outcomes of its functionality. The aim of our study was to analyze the interaction of EpoR and Epo in A2780 and HUVEC cells.

Methods

Isotypes of EpoR were monitored by immunoprecipitation methods and MALDI technology in human ovarian adenocarcinoma - A2780 cells and in human endothelial HUVEC cells.

Results

We have analyzed the presence and the functionality of EpoR isotypes in A2780 and HUVEC cells by immunoprecipitation techniques, pull down assay with G protein particles and MALDI-TOF technology. The immunoprecipitation analysis showed the presence and the interaction of at least 3 isoforms of EpoR (full length, soluble and truncated) with Epo in both cell lines. Lighter forms of EpoR were presented in greater amount in A2780 cells compared to HUVEC cells. Our immunoprecipitation studies were confirmed by MALDI-TOF analysis.

Conclusions

Our findings may have implications for the clinical use of Epo to correct anemia in cancer patients.

Acknowledgment

IGCS-0258
Ovarian Cancer

THE PROGNOSTIC SIGNIFICANCE OF SUGARBAKER'S PERITONEAL CANCER INDEX FOR OVARIAN CANCER

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Objective

To evaluate Sugarbaker's Peritoneal Cancer Index (PCI) as a prognostic parameter of survival in ovarian cancer. Background: Peritoneal carcinosis provokes controversy in discussions of the prognostic parameters of ovarian cancer.

Methods

The data of 127 patients with FIGO stage II-IV ovarian cancer who had surgery between 01/2010 and 12/2011 were analyzed retrospectively.

Peritoneal carcinosis was recorded quantitatively using the PCI and the Completeness of Cytoreduction Score (CCS). The indices were determined retrospectively on the basis of surgical reports, histology reports and intra-operative photo documentation.

The survival analysis was performed using the Kaplan-Meier method. The cohort was divided into two approximately identically sized groups according to the PCI scores. The comparisons among the survival curves were made with log-rank tests. After analyzing the entire cohort, a sub-group analysis of the patient group was conducted, in which a CCS of 0, i.e., no residual peritoneal carcinosis, was achieved by surgery.

Results

104 patients (81.9%) had primary cancer and 23 (18.1%) had a relapse. 92.9% of the patients were at FIGO stage III/IV. The mean age was 63 years, and the average follow-up period was 21 months.

A total of 55 patients (46.6%) survived without a relapse, 30 patients (25.4%) suffered a relapse and 33 patients (27.9%) died.

The analyses of survival and progression-free survival of the entire cohort exhibited statistically significant differences between the groups (p= 0,001, p=0,058). The sub-group analysis exhibited statistically significant differences with p=0,000.

Conclusions

The PCI as an independent parameter correlates with survival in ovarian cancer.

IGCS-0321
Ovarian Cancer

TUMOR DERIVED EXOSOMES IN PLASMA OF PATIENTS WITH OVARIAN CARCIONOMA – A DOUBLE-EDGED SWORD

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Background: In patients with ovarian cancer (OvCa) exosomes released by tumor cells are present in the plasma and could be involved in tumor progression. This study examines the association between exosomes presence/protein content in plasma of OvCa patients and

disease outcome, response to standard therapy and /or tumor resistance to therapies in patients studied at diagnosis and also serially during and after therapy.

Design and Methods: Exosomes were purified from the plasma of patients with OvCa (n=12) or benign tumors (n= 15) and (n=10) healthy controls (NC) using ultracentrifugation. Exosomes were visualized by scanning electron microscopy and their protein content was measured. Their partial molecular content was determined using Western blots.

Results: The OvCa patients' plasma contained higher levels of exosomes ($p < 0.05$) compared to those in the plasma of benign tumor patients or NC. Exosomes from plasma of subjects with OvCa carried TGF-beta and MAGE3/6 that distinguished patients with cancer from those with benign tumors and NC. High protein levels of exosomes were seen in newly diagnosed as well as ess and more advanced patients. The exosme levels variably changed in chemotherapy treated OvCa patients and correlations between the exosomes quantity and clinical data suggested that exosomes protein levels are prognostically important in OvCa patients.

Conclusion: Analysis of plasma exosomes levels offers a novel approach to diagnosis and monitoring response to therapies in OvCa patients.

IGCS-0247
Ovarian Cancer

ISOLATION OF NOVEL METABOLITE MIGRACIN FROM STREPTOMYCES THAT INHIBITS MIGRATION AND INVASION OF OVARIAN CARCINOMA CELLS
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Background and aims: Ovarian cancer can metastasize to the neighboring tissues including liver, lungs, and peritoneal cavity. Therefore, effective metastasis inhibitors should be useful for the chemotherapy against ovarian cancer. In one hand, we are screening cellular signaling inhibitors of low molecular weight active on inflammation and cancer from microorganisms. In the present research, we looked for the inhibitors of cancer cell migration from microbial culture filtrates. After the discovery of new compound, we have evaluated the inhibitory activity on migration and invasion of ovarian carcinoma cells.

Methods: We have evaluated about 650 culture filtrate samples derived from microbes. Cancer cell migration was monitored by wound healing assay with breast carcinoma MDA-MB-231 cells. Human ovarian carcinoma ES-2 cells were employed for further cellular migration and invasion analyses. Cell invasion was studied with Matrigel chamber assay.

Results: We found a culture filtrate that inhibits cellular migration. Active principle was isolated and purified, and its structure was elucidated by spectroscopic analyses. The 2 related compounds were found to be novel, and they were named as migracin A and B. Migracin A was employed for further evaluation, and it was shown to inhibit migration of ovarian carcinoma ES-2 cells. It also inhibited invasion of ES-2 cells at 0.03-0.3 microgram/ml without any toxicity.

Conclusions: Migracin A and B were isolated from a *Streptomyces* culture filtrate as novel cellular migration inhibitors. Migracin A inhibited migration and invasion of ovarian carcinoma cells without toxicity. Migracin may be useful as anti-metastasis agent for ovarian carcinoma.

IGCS-0285
Surgical Techniques

THE EFFICACY OF CARBOXYMETHYL CHITOSAN ON PREVENTING POSTSURGICAL ADHESIONS VERSUS PETROLEUM JELLY IN RAT MODEL

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Backround and Aims: The aim of this study is to evaluate efficacies of different anti-adhesion products and effectivity of different methods for use.

Methods: Fortyfive male Wistar Albino rats randomised 5 groups. Petroleum Jelly(PJ) (Vazelin sivi®, Galenik Ecza Co., Vazelin Likit®,ADR Group Co.) and Carboxymethyl chitosan hydrogel(CC) (Betamix®, Betatech Medical Co.) were used. Group I (peritoneal abrasion)(Figure 1), Group II (PJ application after peritoneal abrasion), Group III (CC application after peritoneal abrasion), Group IV (PJ application before peritoneal abrasion), Group V (CC application before peritoneal abrasion)(Figure 2).All rats were sacrificed on the postoperative 10th day and adhesions scored macroscopically according to Zuhlke's System.

Results: No significant difference was found between Group I and II. Mean score of Group IV was significantly lower than Group I and II ($p<0.05$). Mean score of Group III was significantly lower than Group I, II and IV($p<0.05$). Mean score of Group V was significantly lower than Group I, II, III and IV ($p<0.05$).

Discussion: In surgery for gynecologic oncology, infertility, ectopic pregnancy and dyspareunia can occur in addition to well known complications of peritoneal adhesions like chronic abdominal pain and intestinal obstruction.In the light of this study, the use of CC seems to be more effective to reduce adhesion formation from PJ. Additionally our results showed that the use of anti-adhesion products prior to trauma can be much more effective than coating the traumatised area before abdominal closure.

Figure 1   Figure 2

IGCS-0268
Symptom Management / Palliation

SYMPTOMS MANAGEMENT AND QUALITY OF LIFE IN GYNECOLOGICAL CANCER WOMEN ASSOCIATED WITH DEPRESSION AND ANXIETY

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Background: Symptoms management and quality of life are important for sexual function for women with gynecological cancer. The aim of the study was to estimate the relation between depression and anxiety and sexual dysfunction in women after gynecological cancer treatment.

Materials and methods: Depression and anxiety and sexual dysfunction tests were conducted in 80 patients with gynecological cancer and 80 controls. Patients self-report the severity of sexual symptomology at follow-up visit. Self-Rating Depression Scale-SDS and Self Rating Anxiety Scale-SAS were used.

Results: The most frequent presenting complaints were dyspareunia (69%), atrophic vaginitis (66%), hypoactive desire (44%), and orgasmic dysfunction (21%). Patients have

mild, moderate and severe anxiety (68, 10 and 2, respectively), and mild, moderate and severe depression (54, 14 and 0 respectively). In the control group such changes were not identified. Patients received symptomatic treatment recommendations including hormone therapy alternatives, psychosexual counseling, minimally absorbed vaginal estrogen suppositories, and vaginal dilators. At a median of 6 months 40 patients (50%) self-reported improvement in their symptoms. Mild, moderate and severe anxiety (38, 2 and 0, respectively), and mild, moderate and severe depression (36, 4 and 0 respectively) were detected.

Conclusion: Symptoms management of the sexual dysfunction improved the level of anxiety and depression and quality of life.

IGCS-0269
Symptom Management / Palliation

SYMPTOM MANAGEMENT OF CERVICAL CANCER AND COST ANALYSIS IN RELATION OF THE ECONOMICS IN BULGARIA.

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Background. Cervical cancer survival depends on the effective diagnosis and treatment modalities, and in advanced disease a symptom management is related with economics.

Methods. We reviewed the cervical cancer incidence in Bulgaria from 1993 till 2011. The Bulgarian health system underwent a great deal of reorganization in the last two decades; a general tendency being to facilitate expanding involvement of the private sector in health care.

Results. In 2011, there were 1073 new cases. The crude incidence was 28,5 per 100 000 women, and crude mortality rate was 9,2 per 100 000. In 2011, there were 348 cervical cancer deaths. Trends in cervical cancer incidence and mortality rates showed an increase by 2,6% and by 1,7% annually, respectively. Stage III and IV was 25% in 1993, and 36% 2011. 5-year survival was 47,5% in 1993-2001, and 52,4% in 2002-2011. Our findings clearly suggest that cervical cancer survival is related to macro-economic variables such as the gross domestic product (GDP), the total national (public and private) expenditure on health (TNEH) and the total public expenditure on health (TPEH). Survival is related to wealth (GDP), but only up to a certain level, after which survival continues to be related to the level of health investment.

Conclusion: Our results show that in the last 20 years changes in health politics and absence of a national screening program, were worst for early detection of cervical cancer, and 36% of the cases need symptom management and an increase the costs of cervical cancer treatment.

IGCS-0308
Symptom Management / Palliation

CHARACTERISTICS OF GYNAECOLOGICAL CANCER PATIENTS AT STEVE BIKO HOSPITAL GYNAECOLOGIC ONCOLOGY UNIT DIAGNOSED WITH PULMONARY EMBOLISM (PE)

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Background and aims: The incidence of venous thromboembolism in gynaecological cancer patients is high in our setting. The aim was to identify characteristics of gynaecological cancer patients and management factors that were associated with PE.

Methods: A retrospective case-control study was conducted at Steve Biko Hospital's Gynaecological Oncology Unit in Pretoria. The study consisted of three subgroups (Pop): Pop A - 29 patients that had a V/Q scan confirmed PE; Pop B - 29 patients that had a PE excluded with V/Q scan; Pop C - A second control group of gynaecologic cancer patients, asymptomatic for PE.

Results: The mean age was 53.7 years with no significant difference between the groups. No patients had personal or family history of thrombosis or using hormone therapy. Ovarian cancer was the most common type of malignancy in Pop A and cervical cancer in Pop B and C (Pop A vs C: p=0.008). 41.4% of Pop A had stage IV cancer and 56.7% of Pop C had stage I (Pop A vs C: p=0.011). 82.7% of Pop A, 72.4% of Pop B and 86.7% of Pop C had surgery. PE was more common after staging laparotomies (Pop A vs B: p=0.047). 3.4% of patients died from PE and 86.3% of patients were discharged after the diagnosis.

Conclusion: PE is common among gynaecological cancer patients. Diabetes mellitus, hypertension, smoking and hormone therapy were not significantly associated with PE. Ovarian cancer, staging laparotomy and advance stage disease was associated with PE.

IGCS-0284
Symptom Management / Palliation

GYNECOLOGICAL CANCER AND COMORBIDITIES - CHALLENGE IN TREATMENT IN ELDERLY WOMEN.

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Background: Gynecological cancer is in itself serious diagnose, but in combination with elderly and multiple comorbidities becomes a challenge in complete treatment.

Methods: From 2007 till 2013, 460 patients with gynecological cancer at age 70 years old and older were treated at the department of gynecological oncology in National Cancer Hospital, Sofia.390 of them are in the age group of 70-79 years old, and 70 patients are more than 80 years old.

Results: Most common comorbidities are as follows: hypertension(60% of the cases), ischemic heart disease(15% of the cases), varices of the lower limbs(10% of the cases), cerebrovascular incidents(5% of the cases), anchylosis (2%) or accompanying cancer with other localisation(8% of the cases).Approximately 85 % of cured patients had at least 2 or more comorbities as long term medical history.15 % of patients were diagnosed with 1 comorbidity – most commonly hypertension and heart diseases, followed by cerebrovascular diseases.More than 60% of the patients were diagnosed with advanced stages of gynecological cancer. The surgical treatment in the most cases is the same as in younger patients with gynecological cancer. *No cases of surgical related deaths were registered among the patients.*

Conclusions: Comorbidities and advanced in years of patients requires special care in treatment and diagnostics.

IGCS-0267
Uterine Cancer, including Sarcoma

SURVIVAL OF ENDOMETRIAL CANCER IN BULGARIA: THE IMPORTANCE OF AGE, STAGE AND HOSPITAL IN THE OPERATIVE TREATMENT

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Background: The aim of the study is to estimate the relation between survival and age and stage.

Materials and methods: During the 2006-2010 period in Bulgaria 5580 women with endometrial cancer were treated by operation. The age determination were: < 50 years of age – 606 cases, 50-69 years of age – 3527 cases and 70+ years of age – 1447 cases. Stage I – 3748 patients, stage II – 926, stage III – 558, stage IV – 135, and unknown stage – 213 cases. In 35.64 % of the cases the patients were operated in hospital with more than 50 cases of endometrial cancer annually, in 25.28 % – between 20 and 50 cases and in 39.06 % - less than 20 cases. The survival was calculated by Log Rank (Mantel-Cox).

Results: Overall 5-year survival is 82.4%. We found a statistically significant difference according to age: 91.7% in cases of < 50 years of age; 86.0% in cases of 50-69 years of age and 69.7% in cases of 70+ years of age and stage: 89.2% in cases if Stage I; 78.3% in stage II; 58.4% in stage III and 25.2% in stage IV. The highest 5-year survival is in hospitals with more than 50 operations of endometrial cancer annually – 88.1%, at worst results in hospitals with less than 20 operations 52,1%.

Conclusions: Survival in endometrial cancer is related to age, stage and place of the operation. We recommended the operative treatment to be performed in hospitals with more experience.

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IGCS-0265
Uterine Cancer, including Sarcoma

BRACHYTHERAPY HDR TRETAMENT OF ENDOMETRIAL CARCINOMA BY THE APPLICATION OF MODIFIED HAYMAN'S IRRADIATION TECHNIQUE

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Radiotherapy of endometrial carcinoma is still the only radical method for all inoperable patients and an integral part of overall tretament course in case of surgicelly treated patinets.

The aim of our study was to determine the actual value of modified Hayman's technique as a newly introduced method in the treatment in the treatment of inoperable carcinoma of the endometrium and to prove its advantages in relation to other methods in use.

Our investigation included a group 124 patients divided into three groups according to the type of therapeutic treatment.

The experiments were made in water phantom by means of filmdensometry and a computer system for brachytherapy planning of irradiation of NPS (Nucletron planning system). Using the original approach to the solution we chose an irradiation technique which provides the most favorable distribution of irradiation dosage. Clinical examinations have confirmed that the results obtained in the treatment of endometrial carcinoma by the use of Hayman's technique are much better compared to other two methods we have applied earlier.

The results we obtained by applying the mentioned statistical data processing showed that the introduction of modified Hayman's technique resulted in the increase of the number of patients with five years survival, a decrease in the percentage of recurrences and metastases development, a longer time interval with no clinical signs of disease effects and complication appearances.

IGCS-0280
Uterine Cancer, including Sarcoma

CACINOSARCOMA OF GENITAL TRACT: A CASE SERIES

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Objective: To evaluate our experience with uterine and ovarian carcinosarcoma and identify better treatment for this rare disease.

Methods: 3 cases of uterine carcinosarcoma and 1 case of ovarian carcinosarcoma were identified over a 2-year time period about treatment modalities and prognosis.

Results: All 4 patients underwent initial treatment with TAH+BSO and surgical staging procedure. Patients received adjutant chemotherapy with Paclitaxel/carboplatin and if disease progression happened DTIC/ifosfamid was prescribed and if progression didn't happened adjutant R.T was done. After 18months median fallow up all of them recurred and their response to salvage treatment was short.

Conclusion: Ovarian and uterine carcinosarcoma have a poor prognosis with median survival rates reported in the literature ranging from 7-10 months. Our series, although limited by a small number of patients exhibit these chemotherapy regimens aren't enough for disease control and waiting for new horizons to further findings.

IGCS-0314
Uterine Cancer, including Sarcoma

THE ACCURACY OF 18F-FDG-PET IN DETECTION OF PELVIC AND PARA AORTIC LYMPH NODE INVOLVEMENT IN ENDOMETRIAL CARCINOMA

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Objectives: Fluorine 18 fluorodeoxyglucose positron emission tomography (18 F-FDG PET) imaging has been used for staging and follow up of endometrial cancer. In the current study, we systematically searched the available literature on the accuracy of 18 F-FDG PET imaging for staging of endometrial cancer.

Methods: PubMed, SCOPUS, ISI Web of Knowledge, Science Direct, and Springer were searched using ''endometr* AND PET'' as the search terms. All studies evaluating the accuracy of 18 F-FDG PET in the staging and follow up of endometrial carcinoma were included. Statistical pooling of diagnostic accuracy indices was done using random-effects model. Cochrane Q test and I 2 index were used for heterogeneity evaluation.

Results: Sixteen studies (807 patients in total) evaluating staging and eleven studies (541 patients) evaluating recurrence were included in the meta-analysis. Sensitivity and specificity for detection of the primary lesions were 81.8% (77.9%-85.3%) and 89.8% (79.2%-96.2%); for lymph node staging were 72.3% (63.8%-79.8%) and 92.9% (90.6%-94.8%); and for distant metastasis detection were 95.7% (85.5%-99.5%) and 95.4% (92.7%-97.3%).Pooled diagnostic indices (patient basis) for detection of overall recurrence were as follows: sensitivity 95.8% [92.2–98.1], specificity 92.5% [89.3–94.9], positive likelihood ratio (LR+) 9.53 [6.52–13.91], negative likelihood ratio (LR-) 0.075 [0.044–0.128], and diagnostic odds ratio (DOR) 204 [91.97–453.5]. 18-F-FDG performance was better in studies conducted by PET/CT as compared to PET. The treatment plan changed in 22–35% of the studied patients.

Conclusions: Because of low sensitivity, diagnostic utility of 18 F-FDG PET imaging is limited in primary tumor detection and lymph node staging of endometrial cancer patients. .

IGCS-0260
Vulvar and Vaginal Cancer

MIDDLE AND LOWER HALF SQUAMOUS VAGINAL CANCER NEOADJUVANT RADIOCHEMOTHERAPY FOLLOWED BY RADICAL SURGERY. A CASE REPORT

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We present the case of a 75 years old patient who presented in our service for vaginal bleeding. The clinical examination showed a hemorrhagic tumor about 3,5 cm in width located on the postero-lateral wall of the vagina appearing to slightly infiltrate the rectal wall. The biopsies showed a nonkeratinized squamous cell carcinoma. The contrast MRI effectuated at the beginning of the neo-adjuvant treatment showed a 25/22/35 mm tumor of the postero-lateral vaginal wall extended in the adjacent adipose tissue with infiltration of the right levator ani muscle and intimate contact with the rectal wall. Infracentimetric adenopathy located on the right external iliac vessels and inguinal bilateral were found. The patient underwent external radiotherapy focused on vagina and regional lymph nodes (iliac, inguinal, obturator and presacred lymph nodes) associated with weekly administration of Cisplatin – for 7 weeks. In April 2013 we performed a total colpectomy with total hysterectomy and bilateral adnexectomy associated with bilateral inguinal and pelvic lymph node dissection. The histopathological findings were similar with the biopsies results and the immunohistochemistry described CK34betaE12 zonal positive, P16 negative, P53 negative, Ki67= 45% positive. The patient had a favorable postoperative evolution with no signs of recurrent disease at 9 months follow up.

IGCS-0264
Vulvar and Vaginal Cancer

MULTIVISCERAL PELVIC RESECTION FOR INVASIVE VULVAR SQUAMOUS CARCINOMA IN AN ELDERLY PATIENT – A CASE REPORT

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We present the case of a 78 years old female who addressed our service for a large vulvar tumor diagnosed 2 years before. The patient initially refused all medical treatment. She finally decided to address the oncology department due to progression of the tumor which resulted in impairment of defecation. The clinical examination revealed a 10/8 cm bulging vulvar tumor infiltrating the anal canal. The patient formerly refused radiochemotherapy but accepted the surgical procedure. We performed a total vulvectomy with subtotal colpectomy and rectal amputation associated with pelvic, inter-aortico-caval and bilateral inguinal lymph node dissection. The postoperative evolution was complicated by the apparition of a process of localized perineal suppuration which was successfully managed with local conservative treatment. The histopathological findings showed a squamous keratinized moderate invasive carcinoma with muscular invasion. Lymph nodes presented sinus histiocytosis. After 2 and a half years of postoperative follow-up the patient does not show imagistic or clinical recurrence and reports a good quality of life.

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